R E P O R T R E S U M E S

ED 010 554 24

A PILOT STUDY OF ART EDUCATION FOR THE ECONOMICALLY AND SOCIALLY DEPRIVED CHILD. FINAL REPORT.

BY- BARCLAY, DORIS L.
CALIFORNIA STATE COLLEGE AT LOS ANGELES

REPORT NUMBER CRP-S-489 PUB DATE 66
REPORT NUMBER BR-5-8294
EDRS PRICE MF-$0.09 HC-$2.16 54P.

DESCRIPTORS- *ART EDUCATION, *DISADVANTAGED YOUTH, PILOT PROJECTS, *CHANGING ATTITUDES, CULTURAL ENVIRONMENT, INDIVIDUAL CHARACTERISTICS, *PROBLEM SOLVING, CREATIVE DEVELOPMENT, ECONOMICALLY DISADVANTAGED, SOCIALLY DISADVANTAGED, *CULTURAL ENRICHMENT, LOS ANGELES, CALIFORNIA

THE EFFECT OF ART EDUCATION ON IMPROVING THE ATTITUDES AND CULTURAL AWARENESS OF DISADVANTAGED YOUTH WAS STUDIED IN THIS PILOT PROGRAM. THE CALIFORNIA TEST OF PERSONALITY AND THE CHILDREN'S PERSONALITY QUESTIONNAIRE WERE ADMINISTERED BEFORE AND AFTER A SPECIAL, 12-MONTH ART PROGRAM TO 25 CHILDREN (AGES 8-12) FOR DATA ON PERSONAL AND SOCIAL CHARACTERISTICS. AN INTERVIEW GUIDE WAS CONSTRUCTED TO INDICATE AESTHETIC LITERACY (PERFORMANCE) AND WAS USED BEFORE, DURING, AND AFTER EACH SELECTED ART EXPERIENCE. INTERVIEW QUESTIONS WERE DESIGNED AND USED TO EVALUATE GAINS IN PERFORMANCE RESULTING FROM EACH LESSON OR EXPERIENCE. SOME PRELIMINARY CONCLUSIONS WERE (1) AS CHILDREN DEVELOP NONCONFORMING ATTITUDES AS PART OF SKILL ACQUISITION IN THE VISUAL ARTS, CONFLICT CAN BE GENERATED THAT REPUDIATES ATTITUDES CONDITIONED BY A SUBCULTURAL ENVIRONMENT, (2) ART EDUCATION IS NONESSENTIAL TO THE DEVELOPMENT OF CREATIVE PROBLEM-SOLVING ABILITY, AND (3) ENCOURAGEMENT OF CONFLICTS OR ATTITUDE CHANGES IS A NONESSENTIAL PART OF THE EDUCATION OF ECONOMICALLY AND SOCIALLY DISADVANTAGED CHILDREN. A FOLLOWUP TO THIS PILOT PROJECT WAS SUGGESTED FOR OBTAINING LONGITUDINAL DATA ON THE SAMPLE OF CHILDREN. (RS)

ED010554

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

5-8294
5-489

A PILOT STUDY OF ART EDUCATION

FOR

THE ECONOMICALLY AND SOCIALLY DEPRIVED CHILD

DORIS L. BARCLAY, Ed.D.

California State College at Los Angeles

FINAL REPORT

Introduction

The problem engaged by this study was one of analyzing and describing the degree of conflict, or attitude change, experienced by an economically and socially deprived child while he was developing skill in the visual arts. We accept the general assumption that the role of the school and of art education is to prepare the learner for effective living in our society, but we have little evidence regarding the impact of cross-cultural conflicts that may prevent this objective. Nor do we have sufficient understanding of the degree of conflict generated by art education designed to encourage the qualitative aesthetic growth of children. Although the differences among culturally disadvantaged children tend to invalidate stereotypes, certain characteristics are frequent enough to demand our attention. One such characteristic is the lack of adequate motivation commensurate with the needs of the larger social group. This lack of self direction, wrought by an impoverished environment, is a challenge to education as well as to art education. This study sought to investigate the specific role played by attitudes in the art education of children who come from cultural environments where self direction and self expression have not been encouraged. It was concerned with an analysis of the economically and socially deprived child's rejection of his established cultural pattern.

Data from recent studies in the area of art education have suggested that

intensive experience in the arts promotes freedom from fixed patterns of conceptualization, purposeful self direction, and self expression proportionate with personal needs. These studies indicate that this experience is paralleled by a quality of nonconformism. Furthermore, it is suggested that the quality of nonconformism must be encouraged if the individual is to nurture the capacity for creative solutions to his problems. Obviously, we need to know more about those factors which could prevent growth in this area, and to what degree the child can overcome the limitations of his environment to enter into a creative experience. If children in subculture groups have diverse values which will prohibit their aesthetic literacy growth we need to know those values and understand how they can be modified.

This pilot, or exploratory study, was designed to obtain a clear indication of the feasibility and potential value of a more extensive research project devoted to similar problems. The study involved the extension of fragmentated investigations of the complex cultural differences of children from economically and socially deprived communities and those investigations which supported the importance of including creative or divergent thinking experiences as an essential part of the art education curriculum. A second purpose of this investigation was the development of an objective means of assessing various curricular modifications, at the teacher education level, to insure the effective learning of those who are to teach art in economically and socially deprived communities. Even a cursory review of the literature in art education reveals that there is an increasing focus, on the part of art educators, to confront problems at their fundamental and theoretical levels; to develop a more objective understanding of art education based on research. Thus, research based largely on scientific investigations is providing new and important directions in American art education.

Related Research & Background Information

The rationale for this study was found in the constant need to assimilate and

to integrate the results of related research in the area of education and art education, into a consistent continuum. With a realization that there is an interdependence in the identification and solution of problems; a review of related research indicated that McFee(1) has conducted a study, utilizing a sociological base, for improving the art curriculum in a socially deprived school. The reported data of her study supported the need for, and importance of, further studies of this nature in other depressed poverty areas. Her investigation provided an important resource for this pilot study.

The book Creativity and Art Education, edited by Brittain(2) presents a review of the representative research in the area of creativity related to art education. All of the research represented in this book was pertinent to this study because of (a) its implications concerning the importance of creativity, (b) suggested experimental evidence for developing creative behavior and, (c) the creative process as it affects children's behavior. In particular, a study by Hoffa(3) summarized in the book had a direct relationship to this study. In his investigation, Hoffa sought to demonstrate that intensive art experience is paralleled by a quality of nonconformism. His concern with the relationship of art experience to the individual's acceptance or rejection of his cultural pattern helped to support one of the assumptions of this research: The encouragement of conflicts, nonconforming attitudes, and the rejection of the subculture pattern, is primary to the education of the disadvantaged child.

The data of an investigation by Salome(4) suggested that the art lessons essential to this pilot study have a carefully structured and defined sequence of visual aesthetic experiences. His findings indicated that improved art performance was dependent upon the effectiveness of prior perceptual education. While no attempt was made to further validate his assumptions, attention was paid to his stated conclusions.

A teacher questioning procedure (interview guide) for data gathering purposes and to assist in the verbal development of aesthetic literacy was a valuable part of this research. Support for this procedure was found in a number of comprehensive investigations concerned with the impact of teacher questioning on classroom teaching as well as on art education. Clements(5) summarized, in Studies In Art Education, the findings of these researchers and through his own study made a contribution to our understanding of continued research in this area.

The concern with the economically and socially disadvantaged child as a specific educational problem is comparatively recent. The growth, decay, and isolation of central metropolitan areas has accelerated the need for a thorough understanding of the complexity of the problem. Children living in these areas suffer a culture of poverty which poses a unique educational obligation. The number of sociologists, and educational sociologists, evidencing concern over this problem has grown rapidly in the past few years. The reports of their study and research are of particular interest.

A book titled, Education in Depressed Areas, and edited by Passow(6), presents differing aspects of the problems of education in deprived urban communities. The authors represented in this edition offer suggestions for: (a) an identification of school problems generated by depressed areas, (b) the psychological impact of the depressed central city on children, (c) sociological aspects of education in these areas, (d) the special education of teachers for depressed areas, and (e) specific school programs in gray central areas of the urban city. Riessman(7) in his book, The Culturally Deprived, recommends that educational programs be structured with a cognizance of the strengths as well as limitations the disadvantaged child possesses. He emphasizes the negative effect of the middle class model in curricular development. Another pertinent source is the work of Henry(8) and Deutsch(9). These sociologists postulate that a child from an economically deprived

home is unable to deal with the goals and objectives of the public school because of the differences between the two environments. A more specific example of this problem is to be found in an article by Stiles and Chandler(10) when they emphasize the need for the re-education of culturally disadvantaged groups before urban renewal projects can succeed. Their work helps to define the responsibility educational institutions must assume in first, identifying the goals and objectives of subculture groups and secondly building a program which reflects an awareness of these goals and seeks to change them.

The sixty-fifth edition of the National Society for the Study of Education, edited by William Wattenberg, is devoted to the problem of social deviancy among children and youth.(11) This source book presents an identification of specific deviancy characteristics and a review of current educational trends appropriate to the problem area of our investigation. In addition, the December, 1965(12) publication of the Review of Educational Research evidenced an attention to research particularly pertinent to disadvantaged groups. Yet an earlier article in this same journal by Deutsch(13) presented an important theory for art education in general. She pointed to the importance of visual-motor experiences in the education of socially deprived children to counteract their weakness in the abstract conceptual areas.

A final related research and background information source was found in a publication that grew out of two conferences on productive thinking called by the National Education Association Project on the Academically Talented Student.(14) This book provided an over view of current concepts concerning: (a) the intellect and its development, (b) the importance of motivation on productive thinking, (c) the assessment and measurement of original behavior and, (d) the type of educational procedures necessary for improved creative thinking.

Objectives and Instruments

The basic objective of this art education pilot study was to secure valid data relative to the following assumptions:

A. Children from economically and socially, or more accurately the educationally disadvantaged, deprived environments experience a high degree of conflict as they develop skill in the visual arts.

B. Conflict is generated as the child develops a non-conforming attitude, as a part of acquiring skill in the visual arts, that repudiates the attitudes conditioned by his cultural environment.

C. The encouragement of conflicts, or attitude changes, is an essential part of the education or re-education of the economically and socially deprived child.

D. Art education is essential to the development of the capacity for creative solutions to problems.

E. Art teachers in educationally deprived areas must be educated to deal effectively with the cross-cultural conflicts that are stimulated by successful art experiences.

F. The ultimate justification for any art teacher education curriculum content is dependent upon a continual and objective analysis of all of the variables.

The specific questions to be answered included the following:

A. Does a series of well planned art experiences, taught by an effective teacher, generate the growth of non-conforming attitudes in young children?

B. As the aesthetic, qualitative level, of children is raised is there increasing evidence of conflicting attitudes?

C. To what degree can a child overcome the limitations of his environment to enter into a creative experience?

D. To what extent can conformacy be modified through art experiences?

Prior to a possible experimental investigation, this pilot study was designed to pretest selected art activities and teaching methods supportative to the stated hypotheses. It was theorized that these objectives could best be realized through the following procedures:

A. The selection of a group of twenty-five economically and socially deprived children with an age range of eight to twelve years, by judgment sampling from the population, on the basis of available information thought to be representative of the total population. Specific criterion for the selection of each child was determined by their elementary art supervisor, classroom teacher, elementary school principal, and the researcher.

B. The study group attended an art class once a week, for 12 months, conducted by a graduate art education student, at California State College at Los Angeles. The art activities, or field work of the study, were designed to yield meaningful and relevant data. Among the factors that were taken into consideration in the planning of the program were the following: (a) the frequency of use of specific art skills selected, (b) the age level of each child in the study group, (c) the specific subject matter content, (d) the quality of the planned experiences, (e) the adaptability of the activities to the objectives of this particular study, and (f) the important contributions the art activity could make to the children involved in the project.

C. To secure relevant and pertinent information concerning each of the children in the selected group, and the total population, the following data-gathering procedures were used: (a) observation and acquiring information by firsthand experience, (b) systematic collection and analysis of factual data from such sources as census reports, federal and state governmental bureaus, community publications, public school records, and Chamber of Commerce reports, (c) administration of two before-and-after standardized personality (attitude)

tests, (d) attitudes and opinions compiled through an interview guide, and (e) evaluation of aesthetic literacy by three art faculty judges.

D. Data was quantified by the formation of an equal-interval guide from information derived from computer services. Nonparametric statistics were applied to the resultant data.

E. Conclusions and generalizations, based on the findings of the pilot study, were organized into report form.

Collection of Data

After a review of the literature related to the concern of this pilot study, two testing instruments and two evaluation procedures were selected for the purposes of: (a) providing an objective analysis of the degree, if any, of cross-cultural conflict and personality modification generated by art experiences structured to improve aesthetic performance and literacy; (b) measuring the growth of aesthetic performance and literacy which would supplement the researcher's personal evaluation.

Two nonprojective standardized personality tests were administered to yield a general assessment of the child's personality at the beginning and at the completion of the study. These tests were the California Test of Personality (CTP) (15), and the IPAT Children's Personality Questionnaire (CPQ) (16). The CTP provided information on personal and social characteristics of the children in the group and of the group as a whole. This test was thought to be particularly significant for this study because it measured how the child felt and thought about himself, his self-reliance, his estimation of his own worth, his sense of personal feeling, and his feeling of belonging. In addition, it helped to identify how the child functioned as a social being, and how he felt about social standards, social skills, his family, his school, and community relationships. Table I indicates the information obtained from the pretest use of this instrument and Table II illustrates the posttest scores. An analysis of this data is represented in the Summary and Conclusions of this report.

The pretest and posttest results of the CPQ can be found in Tables III and IV respectively. To avoid the mistake of settling on a single test of personality, this test was used to reinforce the information derived from the CTP. Designed to give the maximum information in the shortest time about the greatest number of dimensions of personality, the test measured fourteen distinct types. It was also selected because of its adaptability to retesting and because, like the CTP, it was constructed for children within the age range of the children in the study group. Table V illustrates the pretest and posttest sten scores for the personality traits thought to be most significant for this study (FACTORS: C, D, E, F, G, and Q_3). Table VI shows the percentage increase or decrease from pretest to posttest for these same factors with the exception of factor D. Because both factor D and factor Q_3 represented those personality traits which measure responses to cultural demands it seemed important to analyze the resultant data in a related form. The relationship of factor D to factor Q_3, or percentage change of factor Q_3 with respect to factor D, in the pretest to the posttest data is portrayed in Table VII. The pretest and posttest score deviations from the mean for factors C, E, F, and G are to be found in Table VIII. In this same table the posttest deviations from the mean for factors D and Q_3 can be seen in relation to factors C, E, F, and G. The total data was evaluated and then related to the data obtained from the CTP (see Table IX) to help in the formation of the generalizations listed in the concluding section of the report.

While these two testing instruments were considered to be most important evaluative and prognostic tools, they did have limitations. The children in the study group were handicapped in so many ways that the test scores may have meanings different from those of non-minority children, even when they are numerically the same. Furthermore, the fact that the norms for the CTP were established from a population where only 15 per cent were from minority groups must be taken into

consideration. While the vocabulary of the CPQ was carefully controlled, it was difficult for the bilingual and deprived children in this study group. For that reason we helped the children with words they did not know and on occasion the entire question or test was read to a few members of the group. Nevertheless it was difficult to determine if they really understood the vocabulary used in the tests since many of the words were not commonly used by the children in the group. We tried to minimize these limitations by utilizing the individual child as his own control and using the test norms principally as a clue. In this way we were better able to gauge the differences between the pretest and the posttest.

When a standardized measure was not available to indicate aesthetic literacy (performance) variables an interview guide, or questioning procedure, was constructed by the researcher. This guide was based on the ten types of questions defined by Clements (5) mentioned earlier in this report, and was formulated with an attention to Guilford's (17) Theoretical Model of the Structure of the Intellect. Individual interviews were conducted before, during, and after each selected art experience. Questions were designed to evaluate the increasing amount of aesthetic literacy developed by each art lesson. Since each session had the student teacher, his assistant, and the researcher in attendance, and was two hours long, there was ample opportunity for individual questioning. The specific answers, evoked by pertinent questions, were analyzed and then recorded as a measure of increased critical or visual literacy. The quality of art performance (end product), judged by the researcher, student teacher and his assistant, for each session was taken into consideration during the rating process. This data provided essential clues and assistance in the formation of a sequential structure of art experiences. No attempt was made to validate this measure. It was thought that validation of the instrument could be a part of an expanded study. The following is a sample of the interview guide used with each child in the group:

Interview Guide: Research Questioning Procedure

Question*	Degree of Increased Critical/Visual Literacy		
	High	Medium	Low
1. Understanding of problem: What are we working for today?			
2. Identification of problem: What is it you are trying to accomplish by doing that?			
3. Discernment of problem: How does this art problem relate to what you do every day?			
4. Process recall of past problem: How is the art process we learned today dependent upon the art process we learned last week?			
5. Recognition of relationship of past problems: What did we do today that we learned last week?			
6. Imaginative projection of problem: What can you do to improve your art work?			
7. Inventive interpretation of problem: Can you discover a new way to do this art problem?			
8. Comprehension of assigned problem: What did your teacher want you to learn today?			
9. Critical analysis of problem: Does today's art lesson suggest an art activity we should do next week?			
10. Judgment of validity of problem: Why did you enjoy/dislike today's art problem?			

*Formulated with an attention to J. P. Guilford's (17) Theoretical Model of the Structure of the Intellect.

With the assumption that an evaluation in a noncognitive area such as art ability would facilitate and augment understanding of how the deprived child

interacts and copes with his environment, a jury of three performing artists was selected. These artists, on the college faculty, were asked to evaluate the art production of the children in terms of its merit as a work of art. Art productions from the beginning sessions were mixed with those from later sessions. The aesthetic quality of each work of art was rated independently by the selected judges. Interjudgmental agreements were determined and a single score for aesthetic merit was assigned to the work. These judgements, the information gathered from the interview guide, and the opinions of those people involved in the project provided the data for the generalizations presented in the Visual Literacy and Learning Sequence section of this report.

Admittedly, this one group study design has several obvious weaknesses that tend to render results equivocal. An expanded study could minimize these weaknesses and allow for important comparisons between groups. In addition, any measured change, or modification, from the beginning to the end of the pilot investigation could have been due to several influences, three in particular: (a) the natural maturation of the children, (b) their familiarity with the format of the tests and testing procedures, and (c) their experiences outside the study situation.

Maturation at this age level (7 to 12 years) could be significant. Three children in the group moved from elementary to junior high school during the period covered by the study. This problem could be avoided in a more extensive research project by excluding children in the second half of the sixth grade. This is particularly important since art is taught by the classroom teacher in the public schools at the elementary level and by an art specialist at the junior high school level. It was not possible to measure the impact of this factor on the increased visual literacy of the three children who entered specialized art classes while they were a part of this study. There was, however, thought to be some relationship.

There was no indication that children retained a familiarity with the format of either personality test. Since the amount of time between the pretest and the posttest (twelve months) was comparatively long, familiarity with the format of these tests was considered highly improbable. The questions on the interview guide did not appear to evoke similar responses from week to week.

By an investigation of the subculture group, from which the children were selected, a relative degree of stability from outside experiences was assumed. The poverty and isolation of their homes and community tended to prohibit any new experiences that would have affected the data sought by the study.

Since the main subject of concern in this investigation was the assessment of possible cross-cultural conflict generated in children by increasing their art performance and aesthetic literacy, an identification of their cultural group characteristics was indispensable. A systematic collection and analysis of census reports, community publications, newspaper articles, as well as personal observations, revealed that in most general terms more people in this subculture group fell in lower status categories than did the other groupings in Los Angeles County. The significance of this lies in the fact that this group comprises a larger percent of the minority population than any other subculture group in the County. Reference to Table X shows: (a) the size of the group and its relation to other cultural groups in Los Angeles County, (b) the median number of years spent in school, (c) the income level of the group, (d) the occupational characteristics, and (e) the housing pattern. This subculture group is identifiable as an ethnic as well as a national concept describing the Spanish speaking group of Mexican ancestry. Even though there is a wide variety of individual differences within the group for all practical educational purposes, in terms of this ethnical and national concept, the Mexican-American is a well-defined social group whose ethos and cultural pattern is identifiable. This culture differs from the culture that

has molded the school and its educational techniques and theory. References to characteristics of this differing culture are made throughout the report.

Table XI illustrates pertinent factual information, collected from public school records, concerning the twenty-two children who remained with the project; three children moved out of the community before the end of the study. It was important that, when evaluating this data, we related and compared each category. For example, the low IQ mean for the group was thought to be directly related to the other data which appears in Table XI. The children we worked with were linguistically handicapped. Coming from a socio-economic stratum of deprivation they lacked the enriched experiences which encourage language, as well as visual and tactile aesthetic development. Although many of them spoke two languages the range of their vocabulary for either was limited. There was a bilingualism of qualitative range within the group and among their parents. The Spanish in this bilingualism of parents and children was often superior to the English spoken. These language barriers and socio-economic, as well as cultural differences, are graphically depicted in Table XI.

From these records, anecdotal data, and from personal discussions with parents we discovered that in the transition from a rural (Mexico and Texas) environment to an urban (Los Angeles) community a degree of social disorganization appeared to have taken place within some of the family groups. A high proportion (five) of our children had parents who were separated or divorced. The fact that it is often easier for a woman to find semi or unskilled jobs than for men in Los Angeles was thought to be a possible cause for these disrupted family patterns. The father, the traditional provider in this subculture group, can no longer assume his authoritarian role. The mother assumes a more dominant role and, working outside the home, she is forced to spend less time with her children. Many of the children in our group did not go home after the Saturday class, but

instead went directly to their local school playgrounds to spend the afternoon. Direct, or indirect, references to the impact of these data are to be found throughout the generalizations formulated on the basis of the pilot investigation.

Summary and Conclusions

Although the generalizations which are made from this pilot investigation must reflect the limitations of a one group study design, they represent an attempt to report an accurate account of the scope of the problems discovered during the project. The over-all data collected appeared to be supportive of many of the original assumptions of the study, primarily:

A. Children from economically and socially deprived environments apparently do experience a degree of conflict as they develop skill in the visual arts.

B. Conflict may be generated as the child develops a nonconforming attitude, as a part of acquiring skill in the visual arts, that repudiates the attitudes conditioned by his subcultural environment.

C. It appears that the effectiveness of art education for disadvantaged children is determined in a large part by the teacher and by the type of teaching methods used.

D. A structured art curriculum, appropriate to the needs of the deprived child, apparently does motivate self-reliance and freedom from fixed patterns of conceptualization.

E. The limitations of the child's poverty environment can be sufficiently overcome for him to enter into increasingly creative experiences.

F. Increased visual aesthetic literacy may help to generate attitudinal modifications .

This study did not find any substantial, or reliable, data to support the

assumption that: (a) Art education is essential to the development of the capacity for creative solutions to problems; and (b) the encouragement of conflicts, or attitude changes, is an essential part of the education, or re-education, of the economically and socially deprived child. Since the field work (art class) of the pilot investigation was based on these two assumptions, it was felt that they were important enough to warrent further research. This would require a follow-up, or longitudinal, investigation of the children in the study group before valid data could be obtained.

Analysis of Study Data

This study secured valid data (see Table IX) that lends credibility to the belief that an established cultural pattern of poverty (see Table XI) can be rejected and a change of attitude, improved self concept, might be encouraged through art education. The CTP evaluated the manner and effectiveness with which each child met his personal and social problems. Higher percentiles represented adjustment, or at least a knowledge of acceptable behavior and attitudes according to the norms of the testing instrument. It is interesting to note that the study group raised their total mean scores from 42.7 percent to 49.3 percent. A further breakdown of this data, in Table IX, indicates that the boys in the group moved from a 37.5 percent mean score to a 48.3 percent mean score during the year of the study. Six boys exhibited an appreciably higher percentile, while one of the six jumped from a 10.0 percent total to a 70.0 percent score. Three boys retained the same over-all score while three registered a somewhat lower score. In a further investigation of the boy who evidenced such a remarkable personality modification, we find the following information: (a) He attended an elementary school that was receiving maximum poverty aid, (b) his mother and father were divorced and his mother supported the family of four children, (c) his public school teachers found him to be a behavior problem in the classroom. The student

teacher established excellent rapport with the boys in the study group, but with this boy in particular. He took the boy and his boyfriend, a friendship established in the art class, on special trips to art institutions in the Los Angeles area. Because of a lack of transportation this boy often walked, five miles, to class in order to help the student teacher prepare for the day's lesson. To our knowledge there were no outside influences to account for this remarkable raise in his score. It is also noteworthy that this boy exhibited a 60.0 percent increase in factor E of the CPQ instrument (see Table VI). This is particularly significant since this factor tends to be positively correlated with social status.

Related to this are the provocative data, also found in Table VI, which indicate that ten children out of the twenty-two in the group showed a percentage increase in the personality dimensions signified by factor E. Importantly, factor E also shows that when group members are on the high side (high score) there is more effective role interaction and each member feels free to participate. Only two children received lower scores on this factor. While ten children did not demonstrate any appreciable change, relative to factor E, a further study of this group reveals that: (a) The two boys who retained the same pre and posttest scores were the youngest boys (8 years old) in the group; and (b) of the eight girls who did not measure any increase, three were well above average, and two were only slightly below average in their respective scores (see Table V).

We also saw the 30.0 percent increase, in factor E, for the girl designated as code #6 significant since she had exhibited the lowest score, among the girls, for that factor in the pretest. She also evidenced something important to the original intent of the study, in that her lower score for factor C suggested that she had experienced a change in her attitudes and interests during the study period. While the total measure of the group for this factor did not depict any great modification from the pretest mean score of 5.82 percent to a posttest mean

of 5.64 percent, it is worthy of further mention.

Factor C was contradictory to the extent that a high score suggested ego strength with stable, constant interests, while a low score indicated changeability in attitudes and interests. For purposes of this study individual scores had to be weighed carefully along with the other information we had available. The C-child, as shown by the response items in Table V was more often dissatisfied with things and people and had difficulty in keeping quiet and restraining himself. The intent of our pilot study required that we encourage the development of ego strength, so that the child could overcome the limitations of his environment; but we were also concerned with encouraging the nonconforming attitudes thought to be important for successful art performance. The fact that only eight (code # 4, 5, 10, 12 boys and # 4, 5, 9, 10 girls in Table VI) out of the twenty-two in the study group evidenced no modification required further attention. We found, that of the eight, (a) five of the children came from slightly higher socio-economic family structures than most of the study group members, (b) two were older than their peers, and (c) the total scores for the one remaining boy showed very little change from pre to posttest testing.

A study of their (1A) Self-Reliance, and (1B) Sense of Personal Worth component scores on the CTP (Tables I and II) signified that, in one or both, all of the eight had higher percentages at the end of the experimental period. This included the one boy (code # 4) who evidenced little over-all change during the year. This data is substantiated by the total personal adjustment pretest and posttest mean scores appearing in Table IX. The boys jumped from a 35.0 percent score to a 53.2 percent score and the girls from 38.0 percent score to 49.0 percent. Furthermore, in those dimensions of personality which were reflected by unconventional behavior (Table VI), the highest percentages of increase were denoted; as much as 60.0 percent in one case. This, and other related information, appeared

to support the feasibility of more extensive controlled research, with age and socio-economic differences measured in relation to the stated hypotheses.

Another approach to this same analysis was through a study of factor F on the CPQ. This factor measured the most important components in extraversion and a higher score suggested that the child felt a part of an optimism-creating environment. Significantly, fourteen children had percentage increases for this factor in the posttest, four remained the same (average or above), and four dropped from 1.4 percent to 3.3 percent (see Table VI). An examination of the four who decreased in this personality dimension during the testing period revealed: (a) No discernable reason for code # 10's decrease since outwardly she appeared to be talkative, cheerful, and happy; (b) code # 8's score may have reflected the fact that she entered junior high school during the course of the project; (c) the people involved in the project evidenced concern for code # 8 since he reflected, during the class sessions, those characteristics reflected in his test score; (d) it was felt there might be some outside family reasons for code # 4's reaction to experiences in the study group. If the information derived from this factor was analyzed correctly it would suggest that these economically and socially disadvantaged children became more "expressive, cheerful, happy-go-lucky, frank, talkative, quick and alert" (16) during the course of this study. This could have been a major and highly significant accomplishment. Our observations of the group during the art classes supported this assumption.

The posttest scores obtained on factor G of the CPQ lended further defense of this possibility, since twelve members of the group evidenced a decrease in their percentage scores. This indicated that they had become more relaxed and less cautious before they spoke. The data assumes an interesting dimension when we realize the suspicion, fear, and sometimes hostility with which many children from lower socio-economic and non English speaking cultural groups approach

authority figures. They, and their parents, stand in awe of school personnel, who are self-assured, competent, verbal and powerful. To register a low score on factor G our children had to overcome any desire to look right socially, or respond to the pattern of their low socio-economic, minority group.

Of the five children who scored higher, indicating greater attention to people and rules, it was noteworthy that both girls and two of the boys were eleven and twelve years of age. No attempt was made to see if age was a factor, but it could be important in any further study of cross-cultural conflicts. According to the test norms there is, on an average, a slight drop of G level with the onset of adolescence. Since the older boys and girls of our study group reacted in a differing manner to the average there could have been a cultural determinate.

At its negative pole factor Q_3 measures a rejection of cultural demands and bears some resemblance to factor D. Table VII was designed to illustrate the percentage change of factor Q_3 with respect to factor D. Referring to Tables III and IV we find that seven boys, but only three girls, had lowered their attention to cultural demands as reflected in the Q_3 factor. Since a higher score for factor D tends to support the personal and social dimensions found in Q_3 we find much the same data: (a) Five boys ranked higher on the posttest; and (b) three girls received higher percentile scores. This would show that at least ten children on one factor and eight on the other evidenced less attention to approved ethical, cultural, standards at the end of the program. It would be an error to postulate, on the basis of this one instrument, that they evidenced cultural conflict, since this test was not formulated with an attention to their subculture characteristics. It is, however, a dimension that bears further study, since so many of our children reflected a modification from pre to post testing.

The 2D Family Relations, 2E School Relations, and 2F, Community Relations (Tables I and II) data can be related to the data obtained from factors D and Q_3, since they all measured how the child rated his social adjustment, or adjustment to the social group. With respect to how the children responded to the various members of his family, we find that fifteen of the study group indicated less attention to the demands of their parents and family. There wasn't any appreciable difference between the boys and the girls in this area of growing personal independence. On the school relations personality inventory, however, six boys indicated that their interest in school and teachers had improved, while only two girls reflected this growth. Significantly, the scores of eleven children (see Table II) testified to less pride in their community than they had in the beginning of the study. This also suggested that they may have become less tolerant of other people.

These combined data offer some evidence that conflict can be generated as children develop nonconforming attitudes, as a part of acquiring skill in the visual arts, which repudiates those conditioned by their environment. This is particularly evident if they come from a well defined subculture group which has its own established mores or patterns of living. The most obvious conflict generated during the period of this study was the children's changing attitudes toward their family group. While many of the younger generation urban upper and middle class subculture members reject some of the value orientations of the group, loyalty to the family remains primary among all classes. Individual security during periods of crisis is provided by this strong family loyalty. Furthermore, in this basically paternalistic society, with tightly knit family traditions, the pressures of conformity play an important role in the life of the child. This study suggests that when some of these pressures are removed conflict may result.

One final indication that the pilot study could have had a role in modifying the children's view of their world is to be found in Table VIII. At the completion of the study fourteen children in the group evidenced a stronger self-concept (factor Q_3) than the population average. The scores on the components concerned with an analysis of the children's feelings of personal worth (CTP) provide reinforcement for this same fact since thirteen children recorded growth in these areas, (see Table II). When you relate this to the limited opportunities these children have had for successful ego development (see Table XI) this becomes even more meaningful.

Reared in an atmosphere of economic disadvantages, cultural conflicts, and sometimes social rejection, the ego development of children from inner cities is a major problem. The cultural concepts, both of poverty and of difference, that vary distinctly from those prevalent in the urban society of the United States affect the growth of improved self-images. Some of these concepts held to be important for the "average" American are in direct contradiction to many of the traditions which have been a part of the child's life until he reaches school age. It is not surprizing that his feeling of personal worth is often lowered once he enters school. When checking the public school accumulative records of the children in this pilot investigation it was not unusual to find that many IQ ratings had dropped from the kindergarten and first grade levels. Cultural differences and bilingual complications were seen as major causes in this lowered IQ index.

In the following section there are further indications of how the poverty of the children's environment could also be measured in these lower than average IQ index ratings:

Transportation and Community Relations

A serious difficulty ensued over the transportation of children to the college from their home community. Failure to arrange transportation would have meant that only six of the selected group of twenty-five children could have attended the art class. Volunteer drivers were recruited from those few parents who had some means of transportation. The researcher assumed the responsibility of transporting five of the children. One parent, bringing his son, walked over three miles each Saturday whenever his automobile was inoperable.

The importance of the college environment in a study of this nature suggests that an expanded project would require greated attention to the problems of transportation. If the number of classes is increased the need to provide transportation on a larger scale would be even more important. Improved means of transportation would enable the groups to not only utilize the resources of the college but to move off the campus to other resourceful areas. The transportation limitations of this pilot study prevented any visitation to other areas of the city. The limited contacts of these children with the broader community make this a serious limitation. The pattern of withdrawal, of forced or deliberate isolation, which is representative of their homogeneity of culture group prevents even an awareness of the total community.

None of the parents or children in the group had ever been on the college campus before the class started. The significance of their developed awareness of the college facilities, in their own immediate community, is obvious in Table According to the 1960 U. S. Census Report the median years of school completed for their subculture group is 9.1 years. One/fifth of this group is considered functionally illiterate.

It was thought that the project may have made a significant contribution to the development of parent understanding concerning the possible progression of their children in school to the college level. The significance of this cannot be minimized since in this country formal education is considered important for enlightened

citizenship and has also become the foundation for occupational opportunities and related socio-economic status. The fact that the children and their parents continued to participate in the project, without any significant drop in enrollment, appeared to be attributable to their pride in attending a class at the college. A few of the parents were encouraged by their children to return to campus and attend some special Art Festival Performances which occured while the study was in progress.

Parents were invited to visit with the student teacher and view the results of the day's lesson, as well as to see the exhibits in the art department gallery which had served as a resource for the children. Considerable time was spent in personal communication with those parents who came on campus. One parent, a repeated visitor, often participated in the art lesson.

Talks with teachers and administrators in the public schools, who had helped in the selection of the children, were conducted in order that they might become more familiar with what the study sought to investigate. A traveling exhibition of the children's art productions was organized and will circulate throughout the elementary schools in the area. It will serve as a visual record of what the project accomplished and also as a resource for classroom teachers and other children. In any continuity and expansion of the study it would seem important to constantly inform instructional and administrative staff, who are not directly involved in the program, of any educational understandings that grow out of the investigation.

Insight into the importance of not bypassing these public school groups was gained by the informative comments of a teacher who had two of his students in the study group. He, and other teachers and administrators emphasized their interest in the study and their desire to know what was accomplished. On occasion some of the children's regular classroom teachers would attend one of the Saturday classes. Public school officials and personnel, as well as parents attended the final exhibition and reception.

Implications For Art Teacher Education

In an attempt to realize the objective of improved teacher education, for those art majors who will eventually teach deprived children, careful attention was paid to the selection of a student teacher for the study group. Criteria for this selection was based on two assumptions: First, the teacher must possess the necessary skills to reach children and motivate them in terms of the cultural world in which they live; and secondly, to effectively encourage the aesthetic literacy growth of others the teacher must himself be artistically talented and sensitive to the value of original and novel performance in the visual arts.

This necessitated the selection of a student teacher who adequately understood the diverse cultural background of the children in the study group without racial, ethnic, social-class, or cultural-regional prejudice. We sought a person who would attempt to absorb the local culture of the community from which the group came. Furthermore, it was thought important, to realize the objectives of the study, that he be a performing artist. It also seemed prudent to seek an art student who was without prejudice or preconceived expectations as to the level of art production which could be expected from each of the children.

A graduate art education major was selected on the basis of her personal talent in art and because of a prior successful student teaching experience with deprived children at the highschool level. In addition a senior art major, who had taught a summer recreational art class in the community from which the children were selected, was hired to assist the student teacher. Unfortunately, a commitment to another job prevented the student teacher's full attention to the study and she was forced to drop the project after the planning stages.

The student selected to replace her had a proven record of achievement in the visual arts; an art major at the senior class level and an exhibiting artist. He had successfully completed two semesters of elementary art methodology, but had not

had any student teaching experience at that level. He was bilingual and a member of the same homogeneity of culture grouping as the children in the pilot study. This, in addition to the fact that he was a man, was thought to be a vital factor in the success of the project. The group, particularly the boys, responded to his leadership in a fashion thought to be common to the subculture group; the distinct leadership role of the male figure. The parents of the children responded in the same fashion to the student teacher as the leader even though they knew the art class was supervised by the researcher, a female.

Both the parents and the children were far more comfortable and communicable when they were understood by, and could converse with the student teacher in Spanish as well as English. This was particularly important since many of the parents spoke only Spanish. (See Table XI .) The student teacher was able to understand and participate in conversations, during the art class, which would not have been possible if he hadn't understood the language of the group. This would suggest that bilingualism should be encouraged for art teachers who teach in areas where the majority of student's language vernacular differs from English. A reasonable proficiency in two languages, or a willingness to acquire it, could be an important requirement for student teachers of art.

Varying in educational background, extent of experience with children at this age level, temperament, and instructional understanding, both the student teacher and his assistant comprised a source of learning for the researcher. Observation of their planning and work, and the degree of success attending both, illustrated many of those teaching qualities which appear to encourage optimal art experience for socially and culturally deprived children. (See: Visual Literacy and Learning Sequence section of the report.) Although, it must be emphasized that while the student teacher and his assistant were able to function effectively their education, or re-education, was a continuous process.

Data from this pilot investigation suggests that an art teacher education program, or a more extensive research study in the same area, should allow for additional preliminary education prior to actual teaching. In addition, periodic in-service education and careful teacher supervision are seen as imperative. Dedication to the education of deprived children is an important component, but dedication should be accompanied by specific skills, knowledge, and understandings. An awareness of the relationship of selected visual experiences to projected goals, and to overcome the deprivation of past experiences, must be continually developed. This relationship of art education to educational sociology and educational psychology, concerned with the problems of deprived children from inner city communities, requires a particular educational focus.

During the pilot investigation regular meetings were held between the student teacher, his assistant, and the researcher during the week and before and after each meeting of the Saturday art class. This allowed for: (a) a discussion of individual children's increased aesthetic literacy; (b) the constant modification of the program to fit the needs of each child; (c) an investigation of new, or different, teaching media and methods; (d) the resolution of problems which constantly evolved. During these meetings there was particular attention paid to the introduction of instructional innovations, designed to overcome the deprivation of the children's prior visual and tactile experiences. An understanding of this deprivation was sought at all times. The parent conferences and home visitations, included in the schedule, provided a basis for some understanding. The conversation of children during class and while being transported to and from the college provided additional information. Reliable data was also obtained from school records, census reports, community publications and other research studies of the same minority group. The result was two undergraduates who, throughout the entire pilot program, exhibited high morale, unusual flexibility, receptiveness of attitude,

and an outstanding willingness to serve the art educational needs of deprived children.

While it is not possible to make any substantiative art teacher education recommendations, based on the one student teacher of this research study, certain interesting clues did become evident. This student teacher evidenced a more significant degree of cross-cultural conflict than any of the children in the study group. He both accepted and rejected his cultural heritage. Until he became more secure in the teaching role he attested to a strong desire not to cling to traditional subcultural ways of living. For example, he indicated that he had forgotten and no longer wished to speak his vernacular tongue. This point of view was modified when he found that using this language facilitated communication to and with the children and their parents. He assumed a prideful attitude about his improved use of the language as the year progressed.

Another of the problems of cross-cultural conflict advanced by a study of this student was that of personal identification. It was not unusual for him to refuse to accept the obvious poverty and limited backgrounds of the children with whom he was working. Because these children came from his own subculture group he totally ignored their lower class status and was often unknowingly defensive of their lack of middle class American experiences. He often suggested art activities which were predicated on the belief that the children were more sophisticated visually than our data indicated. There was some qualification of this attitude as it became obvious that the children were handicapped when presented with activities beyond their level of comprehension. The fact that the children were not censored for their lack of understanding seemed to have some effect on his defensive disposition. It was speculated that social pressures, intensified by being the first member of his family to attend college and move away from the mores of the subculture group, may have caused him some confusion, frustration, insecurity, and

defensiveness. This possibility could present a significant problem in the education of art teachers from minority groups who will, in turn, teach minority groups. This is an important area for future study and research.

The methodology utilized in the field work (art class) of this pilot study offered a number of implications for art teacher education. This methodology was developed to fit the particular needs of the children in the group. Many of the common art education methods, applicable to the middle class, English speaking child were found to be invalid. In order to make a contribution to these socially and culturally disadvantaged children, through the enlightenment, development, and refinement of aesthetic literacy, the following factors guided the development of appropriate methodology: (a) the impact of their isolated, segregated, differing, unassimilated subculture status; (b) their low socio-economic culture of poverty; (c) the significance of their bilingual problems; and (d) their often unstable family structure.

As we became increasingly aware of the degree to which the children in our group were being confronted by conflicting areas of influence, in the home, school, community, and through the television medium, we were better able to plan our program. As it became obvious that each of these areas of influence demanded a continual reconstruction of their system of values we structured, for this group, enriched art and improved social experiences together. We sought to avoid any cultural dichotomies, or contradictions, that could have impeded the effectiveness of the visual and tactile art experiences.

Although the children in the study group came from the same subculture, minority group, it must be emphasized that they brought with them diverse experiences, differing mental abilities, and different psychological needs. The recognition of these individual differences and an awareness of the extreme deprivation of aesthetic experiences they had prior to the class required a careful

attention to the subjective nature of learning throughout our program.

The following suggestions, based on the exploratory data of this pilot study, are offered as one way to improve the art education of economically and socially deprived children. These suggestions have further implications for the education of art teachers:

1. Work for a realistic education of art teachers for problems peculiar to subculture groups:

   A. In-service education for art teachers who are currently teaching in the schools of deprived communities:

      a. Provide detailed information regarding the mores, limitations, and potentialities of the people living in the community the school services.

      b. Develop an awareness of the possible cultural differences and determinates of art teachers from their students and their student's parents.

      c. Encourage an understanding of the problems of poverty.

   B. Provide for the pre-teaching art student's education in:

      a. The problems of inter-cultural relations.

      b. The study of cultural differences and their effect on students as well as on teachers.

      c. The analysis of how poverty effects human beings.

      d. The possible solutions to the problems of differences based on a sound understanding of sociology and psychology.

2. Structure art curriculums with an understanding of :

   A. The effects of family backgrounds and mores on the art activities encouraged in the school.

   B. The effects of the subculture class structure on the art education of children.

   C. The effects of cultural mores on motivation, needs, and purposes relative to planned art programs.

   D. The effects, and limitations, wrought by poverty.

3. Plan to improve the child's self-image through successful art experiences. Art concepts, skills, and techniques, appropriate to their level of development are manditory.

4. Learn what the child is currently responding to aesthetically, the kinds of experiences he is capable of comprehending aesthetically at any given time. Know the limitations wrought by an impoverished environment, with an awareness that sensitivity to beauty can be hampered by prolonged association with the ugly. Concentrate on a step-by-step evolution and do not expect an ideal realization of a goal.

5. Encourage related learnings through well planned art experiences. Use art as a means of developing other intellectual and aesthetic skills. Related to this is the possibility of contributing to the development of new ability testing instruments, based on visual and tactile literacy, to minimize the language handicaps and the lack of familiarity with the mores and symbols of the school.

6. Be aware of possible breakdowns in communication and use language that is clear and concise. Use the strength of visual communication to illustrate the objective and purpose of the art activity. This is particularly true in bilingual communities.

7. Realize that the child's successful artistic growth may mean rejection by his peers, his family and even by members of the community. By developing a capacity to enjoy, or become involved in, increasingly complex and sophisticated kinds of perceptual experience the child may move away from his cultural group.

8. Involve the parents in the art program. An after-school art workshop will communicate the importance of an art experience more than a thousand words on the subject.

Visual Literacy and Learning Sequence

Our first step was to determine what we wanted these children to learn; which art skills and aesthetic comprehensions we wanted them to have at the end of the study that they didn't have at the beginning. We also had to determine which kinds of art performance would reflect any increased understanding as well as skill. For this purpose we classified the art production achievement goals into three categories: (a) knowledge goals, (b) competency goals, and (c) appreciation goals. To measure which children attained the knowledge goals it was necessary to make a careful and constant assessment of those art knowledges we deemed important for this group. This suggested a unification of concepts and propositions primary to the subject matter content of art education. These concepts and related propositions were then organized into a desired scope and sequential knowledge structure. We first identified, then unified, and finally organized the knowledge intrinsic to the art education discipline into an increasingly complex pattern. After using a variety of alternate schemes for establishing sequential levels of difficulty we finally determined that the following organization was most appropriate for the culturally and socially deprived children of this study: First, attention was called to the physical (visual and tactile) perception of the selected subject for study and aesthetic interpretation; secondly, focus was made upon the prominent or conspicuous features of these subjects, their aesthetic function and relation to the whole; thirdly, the environmental relation of the selected subjects and composite components, or parts, to other subjects; fourthly, classification, or identification, which involved grouping of subject and components according to abstracted elements of design and in relation to an increased understanding of what constitutes a work of art.

Aside from the presumably greater demands for conceptualizing, abstracting, and increased skill which each step imposed within each of the listed processes of

analyses, certain definite gradients of difficulty were established and followed. Important to the criteria for establishing these gradients was an understanding of how familiar (or culturally common) the subject was to the child; and the number of parts and interrelations which could be emphasized in a given lesson or sequence of lessons. There was the additional factor of ordering information in amount and kind of difficulty. When we programmed the art education knowledge goals, as well as competency goals and appreciation goals, in a sequential structure we selected the most diffused, general, and inclusive concepts first. Then progressively, the specific and particular concepts followed. This procedure was based on the theory that new ideas can be learned only to the extent that more generalized concepts are available in the cognitive structure of the individual to furnish the essential prior rational. We allowed sufficient opportunity for practice, confirmation, clarification, and correction of previous learning to avoid the assumption that prior learning is directly transferable to new learning.

We found that the deprived environmental conditions that our children lived in had prevented the formation of those generalized visual and tactile understandings commonly acquired by children in other social groups before they enter school. It seemed important, therefore, to structure our art program in the manner just reported. We also increased the time interval between the introduction of new information, or art knowledge, to allow for the correction of previous negative learnings and for the reinforcement of new learning.

To insure that each child attained our selected art production competency goals we elaborated, in detail, the art and aesthetic skills essential for their measurement. We determined that competency, for every child, involved; (a) sucessful art performance, and (b) critical awareness of visual relationships embodied in their works of art. In turn, both performance and critical awareness evaluated the effectiveness of their art knowledge, or information acquired. We discovered that

the amount of information (art knowledge) each child acquired was relative to its immediate applicability. A high degree of competency was evidenced when the child was asked to draw or critically determine concrete, tangible, and particularized properties of familiar objects. There appeared to be a perceptual disposition to respond to those things that could be readily discernable and understood. While the range of art knowledge acquired was limited it was reflected in highly competent and successful art performance. The verbal analysis of each work of art followed this same pattern. Each child became increasingly aware of the visual relationships embodied in his own work and explained these without hesitation.

Finally, the appreciation goal we sought for our children was measured by their aesthetic decisions. If these decisions appeared to be based on increased understanding, or aesthetic visual literacy, we felt the goal had been reached. The degree of aesthetic appreciation evidenced by the child in related or unrelated everyday visual experience was our clue. There were some minor indications of this in the changed dress pattern of the older boys and girls in the group, and in the group's reaction to exhibits in the departmental gallery. We did, however, find it impossible to really measure the success of this goal within the limitations of this study. Follow-up studies, involving a study of the home environment would be necessary to truly measure this important dimension. We did find that their final art productions did reflect appreciation dependent upon ability to relate past experience to immediate perception. They appeared to perceive new meanings, have appreciation, when they were able to recall a personal experience with the elements that constituted their own artistic production.

Generalizations

This pilot project helped to demonstrate that the development of a sound and meaningful art education curriculum for socially and culturally deprived children needs greater experimentation, more opportunity for evaluation, an exceptional

staff, and a long-range educational perspective. The results of the project have been substantially positive. Not only have specific benefits been afforded the children who were in the study group, but understanding has been acquired as to the general problems involved in the art education of children from minority groups.

In a future extension of the present study the dynamics of acculturation, diffusion, and assimilation as they affect and are effected by art education could be subjected to further empirical and experimental investigations. Since the primary function of a pilot study is to take a broad, topical view of the aspects and problems of the area of inquiry the following specific conclusions, suggestions, and questions formulated from the data of this pilot study could provide the guidelines for such expanded investigations:

1. At the beginning of the study there was an indication of persistent conflict when children, in the study group, were presented with an art activity which required them to ask questions and receive answers from the teacher. This may have been due to the fact that they were not accustomed, or encouraged, to ask questions of adults at home. The art activities which were structured to encourage independent, self-sufficient endeavor, appeared to be the most rewarding and satisfying to the child.
2. The children in this study evidenced few and limiting visual aesthetic readiness experiences. The isolation, segregation, poverty of their home and community, and inability to use adults as sources of information appeared to be reflected in their restricted visual awareness and poor perceptual discrimination. Initially, they did not appear to differentiate objects presented for study on the basis of color, texture, or line. Any attempt to encourage a visual awareness beyond their

comprehension resulted in conflict and an imitation rather than an understanding. A high degree of success was achieved in this area by carefully selecting the results of their own art production and a number of visual objects of differing textures, shapes, colors, and sophistication for constant and continuing attention.

3. Long, complex, or sequential directions issued prior to a art activity resulted in failure. They only responded to the last thing they heard and understood. Due to the bilingual and restricted language development level of their home environments these children seemingly required short and simple directions, issued in precise, related words. Spanish was used when necessary. By utilizing a visual aid, or visual explanation, the multiplicity and difficulty of verbal communication also appeared to be somewhat minimized.

4. Teacher attention and sensitivity was a strong positive reinforcer for these children. The quality of art production, following the teacher's clearly stated, precise, and individual directions, rose rapidly. This production quality was lowered when the teacher withheld any comment or individual attention.

5. There was some evidence of growing conflict generated between children and parents as the child developed art skills beyond the level of the parent. While parents supported the child's attendance in the special art class, there appeared to be some anxiety about losing status in the eyes of the child. It is felt that a concurrent class for parents might have helped to prevent this feeling of threat.

6. A deliberate attempt was made to generate curiosity concerning future art lessons. These attempts met with continuing failure. An occasional question, answered evasively, appeared to satisfy the inquirer. While

it could not be determined directly if the deprivation of the child's environment made him less curious and more accepting, there was thought to be a relationship. The importance of a curious, inquiring approach to an art problem suggests that this area needs further attention.

7. Group, rather than individual, art activities met with repeated failure. The apparent need for individual self-confidence and personal ego development seemed to generate a negative and competitive attitude in a group activity. This was particularly evident between the boys and girls in the older age range (10 to 12 years) of the study. Here the cultural characteristics of the dominant male figure becomes most evident. The boys, while competing with one another, verbalized on their superiority over the girls in the group. The boys and girls never chose to sit or work together.

8. Related to the last problem was the success of a male teacher as the leader of the group. The children in the study appeared to respect their teacher and seek help from his female assistant only in personal matters unrelated to the task at hand. This tended to suggest the impact of the role played by males and females in their subculture group.

9. In the beginning the children in the study group did not reflect an awareness of praise as a reward. They often seemed suspicious, and distrustful of any praise offered as encouragement. A reward for work well done appeared better understood in the concrete realization of the cookies passed out at the end of the art lesson. There was some modification of this attitude during the project period.

10. The attention span of the group members, if they saw an immediate solution to the assigned art problem, was often two hours long.

11. When assigned art problems appropriate to their level of understanding, i.e. "a church in your neighborhood" vs. "a day at the ocean," the art production was visually literate.
12. There was an indication of a growing capacity to enjoy, or become involved in, increasingly complex and sophisticated kinds of artistically perceptual experiences on the part of the study group during the year.
13. An elementary awareness of the formal relations of the imagery elements perceived in their art production, and the ways in which the structured parts were related, was evidenced during individual evaluations with each of the children in the study group.
14. Visual perceiving and visual knowledge seemed to be dependent upon the child's concrete realization of certain defined structural features.
15. There was an indication of increased visual control in the ordering of elements into a satisfying production. The ability to select aesthetic alternatives became noticeable.
16. Attention to the development of enriched line, color, and texture, the prime elements of their art productions, resulted in more detailed and sensitive work.
17. A sustained long-term twelve month concentration in the specific areas of drawing and painting resulted in increased aesthetic quality and understanding.
18. There wasn't any indication of cultural pluralism, symbolic subculture aesthetic forms, in art productions. The age (7 to 12 years) of the children seemed to prevent any strong identification with art forms that were not a part of their immediate environment.

Finally, a statement may be made concerning the general field of art education for children with the special problems of poverty. The specific area of attention, while still in its infancy, is an imperative one. The Los Angeles riots in Watts left 34 persons dead, more than 1,000 injured, and caused an estimated $40 million dollars in damage. Nearly 4,000 were arrested. Fire destroyed 200 buildings and another 600 were damaged by burning and looting. High unemployment, low incomes, substandard housing and a high percentage of broken homes are the way of life for Negroes and Mexican-Americans in Los Angeles, according to a special Census Bureau survey report. What happened in Los Angeles can only be prevented by a concerned and concentrated effort on the part of all educators to modify these existing patterns. The school is the one institution in our country that reaches all of the people during their important formative years. If we believe that art education is important let us accept all of our children and youth as worthy, valuable, uniquely human, and structure our curriculums to develop free, creative minds to overcome the limitations of an environment wrought by poverty. This pilot project was dedicated to that purpose.

BIBLIOGRAPHY

(1) McFee, June; "Art For the Economically and Socially Deprived." Art Education, The Sixty-fourth Yearbook of the National Society for the Study of Education, Chicago:N.S.S.E., 1965, pp. 153-174.

(2) Creativity and Art Education, (Edited by W. Lambert Brittain), Washington D.C.: N.A.E.A., 1964.

(3) Hoffa, Harlan. "The Relationahip of Art Experience to Some Attributes of Conformity." Unpublished Doctoral Dissertation, The Pennsylvania State University, University Park, 1959.

(4) Salome, R. A., "The Effects of Perceptual Training Upon the Two-Dimensional Drawings of Children," Studies in Art Education, N.A.E.A. Volume 7, Autumn 1965, pp. 18-33.

(5) Clements, Robert D., "Art Student-Teacher Questioning," Studies in Art Education, N.A.E.A., Volume 6, Autumn, 1964, pp. 14-19.

(6) Education In Depressed Areas, A. Harry Passow, editor. New York: T. C. Columbia University, 1963.

(7) Riessman, Frank, The Culturally Deprived Child, New York: Harper, 1962.

(8) Henry, Jules, Culture Against Man. New York: Random House, 1963.

(9) Deutsch, Martin. "Early Social Environment: Its Influence on School Adaptation." The School Dropout. (Edited by Daniel Schreiber.) Washington, D.C.: Project: School Dropouts, N.E.A., 1964. Part I, pp. 89-101.

(10) Stiles, Lindley J. and Chandler, B. J., "Urban Schools for the Future," (Edited by B. J. Chandler, Lindley J. Stiles, and John I. Kitsuse. New York: Dodd, Mead, and Co., 1962, pp. 250-52.

(11) Social Deviancy Among Youth (Edited by William Wattenberg), Chicago: N.S.S.E., 1966.

(12) Review of Educational Research, (Edited by Jacob T. Hunt), A.E.R.A., December 1965, Vol. XXXV, No. 5.

(13) Deutsch, Cynthia P., "Education for Disadvantaged Groups," Review of Educational Research, A.E.R.A., April, 1965, Vol. XXXV, No. 2, pp. 140-145.

(14) Productive Thinking in Education, (Edited by Mary Jane Aschner and Charles E. Bish) New York: N.E.A., 1965.

(15) Thorpe, Louis; Clark, Willis; and Tiegs, Ernest. California Test of Personality. Monterey: California Test Bureau, 1953.

(16) Porter, Rutherford, and Cattell, Raymond. IPAT Children's Personality Questionnaire "The CPQ". Chicago: Institute for Personality and Ability Testing, 1959.

(17) Guilford, J. P., and Merrifield, P. R. The Structure-of-Intellect Model: Its Uses and Implications. Report of the Psychology Laboratory, No. 24. Los Angeles: University of Southern California. 1960

TABLE I PRETEST *

CALIFORNIA TEST OF PERSONALITY (CTP)

(Primary and Elementary Series)

	Personal Adjustment (a)							Social Adjustment(b)							
COMPONENT	1A	1B	1C	1D	1E	1F	TOTAL	2A	2B	2C	2D	2E	2F	TOTAL	TOTAL ADJUSTMENT
BOYS															
1	30	40	30	90	60	20	30	60	20	20	80	20	40	10	30
2	20	50	20	50	40	30	30	30	70	50	30	30	30	30	30
3	40	30	50	70	40	60	40	40	50	90	80	60	90	70	60
4	40	20	50	50	30	40	30	60	50	20	30	40	30	30	30
5	20	50	10	70	1	60	20	60	50	40	70	60	60	60	40
6	10	30	50	30	10	40	20	80	30	10	30	10	20	10	10
7	60	20	70	30	30	10	20	30	90	30	30	20	30	30	30
8	80	2	10	10	30	40	10	30	30	70	30	1	10	10	10
9	40	80	50	70	60	40	50	20	50	50	90	30	40	40	40
10	40	20	50	50	30	40	30	40	50	30	80	30	60	40	40
11	80	90	50	50	50	30	80	80	70	30	80	40	40	50	60
12	60	90	70	70	40	60	70	80	30	70	80	60	90	70	70
GIRLS															
1	80	30	90	90	40	80	70	60	90	70	90	80	40	80	80
2	40	30	1	30	60	40	20	60	50	10	10	60	2	10	20
3	60	20	50	90	10	10	20	10	20	20	90	40	40	20	20
4	20	30	20	50	30	10	10	60	50	5	80	60	60	40	30
5	40	10	10	20	40	80	20	60	70	50	20	30	30	30	30
6	80	30	20	30	60	40	30	60	90	90	90	80	60	80	50
7	60	90	50	50	40	80	30	80	70	70	50	60	90	70	50
8	60	80	90	90	40	80	80	60	70	70	80	80	90	70	80
9	40	90	70	90	60	80	80	80	90	90	90	60	90	98	90
10	60	30	20	30	20	40	20	40	70	70	80	60	30	50	40

(a)=Personal Adjustment: 1A-Self-Reliance; 1B-Sense of Personal Worth; 1C-Sense of Personal Freedom; 1D-Feeling of Belonging; 1E-Withdrawing Tendencies; 1F-Nervous Symptoms.

(b)=Social Adjustment: 2A-Social Standards; 2B-Social Skills; 2C-Anti-Social Tendencies; 2D-Family Relations; 2E-School Relations; 2F-Community Relations.

*Data in Percentiles

TABLE II POSTTEST*

CALIFORNIA TEST OF PERSONALITY (CTP)

PRIMARY AND ELEMENTARY SERIES

COMPONENT:	Personal Adjustment							Social Adjustment							TOTAL
	1A	1B	1C	1D	1E	1F	TOTAL	2A	2B	2C	2D	2E	2F	TOTAL	ADJUSTMENT
Boys															
1	20	30	30	90	50	10	30	10	30	20	80	50	60	40	30
2	10	10	30	10	70	50	20	40	70	10	5	40	20	30	30
3	80	90	70	90	60	90	90	80	70	90	90	80	60	95	90
4	90	90	40	90	70	30	60	5	70	5	80	50	40	30	50
5	60	50	40	70	90	80	50	20	50	30	40	60	40	40	50
6	20	2	70	70	40	60	30	60	80	50	1	10	30	10	20
7	20	50	5	20	10	50	20	1	30	10	2	20	5	5	10
8	70	98	50	40	90	80	80	60	30	90	60	60	40	60	70
9	90	90	90	90	95	95	98	40	95	70	80	60	60	80	90
10	40	60	40	30	80	30	40	20	20	30	40	10	5	20	30
11	90	90	10	40	95	50	60	5	70	70	30	20	20	30	40
12	30	60	40	40	95	95	60	60	5	90	60	60	10	80	70
Girls															
1	90	98	70	70	95	95	95	40	90	90	80	80	80	90	95
2	5	20	10	10	40	5	10	5	90	2	10	20	10	10	10
3	30	20	10	10	20	1	10	40	50	10	1	20	40	20	10
4	20	40	5	20	10	0	5	40	50	1	20	10	60	20	10
5	90	50	70	70	80	80	70	40	70	90	60	60	60	70	70
6	40	50	70	70	90	20	50	40	50	70	60	80	40	60	50
7	90	80	50	70	80	80	70	40	70	70	40	60	60	60	70
8	60	90	50	90	95	80	80	40	90	70	80	50	60	70	80
9	1	50	90	95	80	80	40	90	70	80	50	60	70	70	80
10	60	50	50	40	20	50	40	10	30	20	40	10	60	30	30

*DATA IN PERCENTILE

(SEE TABLE I FOR A DEFINITION OF COMPONENTS)

TABLE III (PRETEST)*

THE CHILDREN'S PERSONALITY QUESTIONNAIRE (THE CPQ)

Boys	A	B	C	D	E	F	G	H	I	J	N	O	Q_3	Q_4
+1	5	6	6	1	2	4	7	7	7	6	3	6	8	1
+2	2	4	5	6	6	4	4	4	9	7	9	5	6	5
3	7	5	5	2	1	3	9	9	9	5	2	3	9	1
4	6	4	7	6	5	6	7	6	6	6	4	4	9	4
+5	7	3	5	2	2	5	8	9	7	5	4	6	8	6
6	4	7	3	5	5	5	3	1	10	7	8	6	7	4
+7	5	5	4	5	6	6	3	5	2	7	6	5	6	5
8	6	3	6	3	1	5	8	7	7	2	4	3	9	4
+9	10	4	9	1	1	5	9	9	8	4	2	3	10	1
10	7	5	5	3	4	3	8	7	6	5	4	6	8	5
11	6	5	5	5	5	5	6	6	5	5	6	3	4	5
+12	10	5	7	5	4	7	6	8	7	5	5	4	8	4
Mean (8-10½ yrs)	6.4	6.4	6.0	4.3	5.1	5.2	6.8	5.6	3.5	3.7	3.9	4.2	6.1	4.3
+Mean (10½-13 yrs)	6.3	7.4	6.0	4.8	5.9	6.0	6.8	5.6	3.1	3.7	3.9	4.2	5.7	4.5
Standard Deviation	1.9	2.0	2.1	2.2	2.1	1.9	2.0	2.0	2.2	1.9	2.1	2.2	2.4	2.2
Girls														
+1	6	5	9	2	3	5	9	8	7	4	4	5	8	4
+2	4	4	5	5	4	7	4	6	5	6	8	6	4	5
3	2	4	5	6	4	5	2	4	9	10	6	9	5	6
4	4	4	5	3	6	5	1	3	5	7	8	9	3	7
+5	5	5	5	2	3	2	9	6	10	6	4	5	10	2
+6	8	5	5	5	1	4	3	7	7	8	8	5	5	4
7	5	10	6	4	8	7	2	5	5	6	6	5	4	5
+8	6	4	10	5	2	6	7	6	10	6	6	2	10	4
9	8	5	6	4	2	5	7	7	7	6	4	5	9	2
10	4	4	5	4	8	7	5	5	4	8	5	7	5	6
Mean (8-10½ yrs)	7.	6.7	6.	3.5	3.1	2.2	7.7	5.5	6.8	3.8	2.6	4.4	7.3	3.6
+Mean (10½-13 yrs)	7.	7.7	6.	4.3	4.1	3.6	7.7	5.5	6.1	3.8	2.6	4.4	6.9	4.3
Standard Deviation	1.9	1.9	2.1	2.2	1.8	1.9	1.9	2.1	2.2	1.8	1.9	2.2	2.1	2.2

*data in Stens

TABLE IV POSTTEST *

THE CHILDREN'S PERSONALITY QUESTIONNAIRE (CPQ)

BOYS	A	B	C	D	E	F	G	H	I	J	N	O	Q_3	Q_4
1	5	4	5	5	6	6	8	8	6	6	7	5	8	4
2	8	3	6	3	3	6	6	8	6	4	5	5	6	2
3	8	6	7	2	1	4	9	7	8	2	3	3	9	1
4	7	7	7	4	5	7	4	4	6	5	6	4	6	5
5	8	6	5	5	6	7	2	6	5	4	6	5	6	5
6	3	3	2	7	5	4	2	3	6	9	7	9	5	8
7	6	6	5	6	8	7	5	4	5	7	7	5	3	8
8	10	3	9	3	5	7	7	9	8	4	3	3	8	4
9	8	3	6	4	7	9	5	7	4	5	3	3	6	2
10	5	3	5	3	7	5	7	5	5	8	7	6	7	5
11	6	10	9	6	8	8	4	7	5	6	6	4	5	5
12	8	5	7	5	6	7	6	7	2	7	4	5	6	5
GIRLS	A	B	C	D	E	F	G	H	I	J	N	O	Q_3	Q_4
1	5	3	7	1	3	5	7	7	7	2	4	5	10	1
2	4	2	3	6	6	9	4	7	4	9	9	7	5	5
3	4	5	2	4	4	5	6	6	9	9	7	7	6	5
4	5	5	5	7	6	7	1	2	5	8	7	9	3	7
5	6	4	5	2	3	7	7	7	7	4	6	4	8	2
6	6	6	4	5	4	5	2	7	10	7	9	5	3	5
7	6	3	7	3	8	8	5	6	9	4	4	5	9	3
8	6	5	7	4	2	5	7	7	10	5	4	4	8	2
9	8	4	6	5	2	5	9	7	7	2	6	4	9	4
10	3	4	5	5	8	6	4	3	5	5	4	6	3	5

*Data in stens

TABLE V

THE CHILDREN'S PERSONALITY QUESTIONNAIRE (CPQ)

	PRETEST SCORES*					
FACTORS:	C	D	E	F	G	Q_3
Boys						
1	6	1	2	4	7	8
2	5	6	6	4	4	6
3	5	2	1	3	9	9
4	7	6	5	6	7	9
5	5	2	2	5	8	8
6	3	5	5	5	3	7
7	4	5	6	6	3	6
8	6	3	1	5	8	9
9	9	1	1	5	9	0
10	5	3	4	3	8	8
11	5	6	5	5	6	4
12	7	5	4	7	6	8
Girls						
1	9	2	3	5	9	8
2	5	5	4	7	4	4
3	5	6	4	5	2	5
4	5	8	6	5	1	3
5	5	2	3	2	9	0
6	5	5	1	4	3	5
7	6	4	8	7	2	4
8	0	5	2	6	7	0
9	6	4	2	5	7	9
10	5	4	8	7	5	5

	POSTTEST SCORES*					
FACTORS:	C	D	E	F	G	Q_3
Boys						
1	5	5	6	6	8	8
2	6	3	3	6	6	6
3	7	2	1	4	9	9
4	7	4	3	4	3	6
5	5	5	6	7	2	6
6	2	7	5	4	2	5
7	5	6	8	7	5	3
8	9	3	5	7	7	8
9	6	4	7	9	5	6
10	5	3	7	5	7	7
11	9	4	8	8	4	5
12	7	5	6	7	6	6
Girls						
1	7	1	3	5	7	0
2	3	6	6	9	4	5
3	2	4	4	5	6	6
4	5	7	6	7	1	3
5	5	2	3	7	7	8
6	4	5	4	5	2	3
7	7	3	8	8	5	9
8	7	4	2	5	7	8
9	6	5	2	5	9	9
10	5	5	8	6	4	3

*Data in stens

GENERAL ANALYSIS OF FACTORS:

C = Ego Strength/ego weakness
D = Phlegmatic/excitable
E = Submissive/dominant
F = Desurgency/surgency
G = Frivolous/pursevering
Q_3 = Self Sentiment: weak/strong

TABLE VI

CHILDREN'S PERSONALITY QUESTIONNAIRE

PERCENTAGE INCREASE (+) OR DECREASE (-) FROM PRETEST TO POSTTEST SCORES

	FACTORS				
Boys	C	E	F	G	Q_3
1	- 1.7	+20.0	+ 5.0	+ 1.4	0
2	+ 2.0	- 5.0	+ 5.0	+ 5.0	0
3	+ 4.0	0	+ 3.3	0	0
4	0	- 4.0	- 3.3	- 5.7	-3.3
5	0	+20.0	+ 4.0	- 7.5	-2.5
6	- 3.3	0	- 2.0	- 3.3	-2.9
7	+ 2.5	+ 3.3	+ 1.7	+ 6.7	-5.0
8	+ 5.0	+40.0	+ 4.0	- 1.3	-1.1
9	+ 3.3	+60.0	+ 8.0	- 4.4	-4.0
10	0	+ 7.5	+ 6.7	- 1.3	-1.3
11	+ 8.0	+ 6.0	+ 6.0	- 3.3	+2.0
12	0	+ 5.0	0	0	-2.5
Girls					
1	- 2.2	0	0	- 2.2	+ 2.5
2	- 4.0	+ 5.0	+ 2.9	0	+ 2.5
3	- 6.0	0	0	+20.0	+ 2.0
4	0	0	+ 4.0	0	0
5	0	0	+25.0	- 2.2	- 2.0
6	- 2.0	+30.0	+ 2.5	- 3.3	- 4.0
7	+ 1.7	0	+ 1.4	+15.0	+12.5
8	- 3.0	0	- 1.7	0	- 2.0
9	0	0	0	- 2.9	0
10	0	0	- 1.4	- 2.0	- 4.0

TABLE VII

PERCENTAGE CHANGE OF FACTOR Q_3 WITH RESPECT TO FACTOR D $\frac{Q_3 - D}{D} \times 100$

PRETEST		POSTTEST	
Boys		Boys	
1	+70.0	1	+ 6.0
2	0	2	+10.0
3	+35.0	3	+35.0
4	+ 5.0	4	+ 5.0
5	+30.0	5	+ 2.0
6	+ 4.0	6	- 2.9
7	+ 2.0	7	- 5.0
8	+20.0	8	+16.7
9	+50.0	9	+ 5.0
10	+16.7	10	+13.3
11	- 3.3	11	- 1.7
12	+ 6.0	12	+ 2.0
Girls		Girls	
1	+30.0	1	+90.0
2	- 2.0	2	- 1.7
3	- 1.7	3	+ 5.0
4	- 6.3	4	- 5.7
5	+40.0	5	+30.0
6	0	6	- 4.0
7	0	7	+20.0
8	+10.0	8	+10.0
9	+12.5	9	+ 8.0
10	+ 2.5	10	- 4.0

TABLE VIII

CHILDREN'S PERSONALITY QUESTIONNAIRE (CPQ)

% DEVIATION FROM MEAN*

	PRETEST				POSTTEST					
Boys	C	E	F	G	C	E	F	G	D	Q_3
1	+05	-35	-15	+15	+25	-05	+05	+05	+25	+25
2	-05	+05	-15	-15	+05	+05	-15	+05	+05	+05
3	-05	-45	-25	+35	+35	+15	-45	-15	+35	+35
4	+15	-05	+05	+15	+35	+15	-25	-15	-25	+05
5	+05	-35	-05	+25	+25	-05	+05	+15	-35	-05
6	-25	-05	-05	-25	+15	-35	-05	-15	+35	-05
7	-15	+05	+05	-25	+05	-05	+25	+15	-05	-25
8	+05	-45	-05	+25	+35	+35	-05	+15	+15	+25
9	+35	-35	-05	+35	+45	+05	+15	+35	-05	+05
10	-05	-15	-25	+25	+25	-05	+15	-05	+15	+15
11	-05	-05	-05	+05	-15	+35	+25	+25	-15	-05
12	+15	-15	+15	+05	+25	+15	+05	+15	+05	+05
Girls										
1	+35	-25	-05	+35	+25	+15	-25	-05	+15	+45
2	-05	-15	+15	-15	-15	-25	+05	+35	-15	-05
3	-05	-15	-05	-35	-05	-35	-15	-05	+05	+05
4	-05	+05	-05	-45	-25	-05	+05	+15	-45	-25
5	-05	-25	-35	+35	+45	-05	-25	+15	+15	+25
6	-05	-45	-15	-25	-05	-15	-15	-05	-35	-25
7	+05	+25	+15	-35	-15	+15	+25	+25	-05	+35
8	+45	-35	+05	+15	+45	+15	-35	-05	+15	+25
9	+05	-35	-05	+15	+35	+05	-35	-05	+35	+35
10	-05	+25	+15	-05	-05	-05	=25	+05	-15	-25

*RELATE THIS DATA TO THE DATA IN TABLE XI

TABLE IX

CHILDREN'S PERSONALITY QUESTIONNAIRE

Pretest Mean Scores

FACTORS:	C	D	E	F	G	Q_3
BOYS	5.58	3.75	3.50	4.83	6.50	7.67
GIRLS	6.10	4.50	4.10	5.30	4.90	6.30
TOTAL GROUP	5.82	4.09	3.77	5.05	5.77	5.05

Posttest Mean Scores

FACTORS:	C	D	E	F	G	Q_3
BOYS	6.08	4.25	5.42	6.17	5.03	6.45
GIRLS	5.10	4.20	4.60	6.20	5.20	6.40
TOTAL GROUP	5.64	4.23	5.05	6.18	5.27	6.32

CALIFORNIA TEST OF PERSONALITY

Pretest Mean Scores				Posttest Mean Scores			
AREAS:	PER.ADJ.	SOC.ADJ.	TOTAL	AREAS:	PER.ADJ.	SOC. ADJ.	TOTAL
BOYS	35.0	37.5	37.5	BOYS	53.2	43.3	48.3
GIRLS	38.0	54.8	49.0	GIRLS	49.0	52.5	50.5
TOTAL	36.4	45.4	42.7	TOTAL	51.3	47.5	49.3

TABLE X

RELATED SUBCULTURE CHARACTERISTICS: 1960*

CHARACTERISTICS	SUBCULTURE GROUP	TOTAL POPULATION LOS ANGELES COUNTY
SIZE OF SUBCULTURE GROUP	576,716 (total other minority groups: 584,905) 100% increase 1950-60	6,038,771 45% increase 1950-60
MEDIAN YEARS SCHOOL COMPLETED	9.1 years (1/5 total group functionally illiterate)	12.2 years
INCOME LEVEL	25% under $4,000; 41% from $4,000 to $6,999	19% under $4,000; 30% from $4,000 to $6,999
OCCUPATIONAL	Men: 32% operatives & related work Women: 40% operatives & related work Unemployed: 8%	Men: 20% craftsmen & foremen Women: 36% clerical & related work Unemployed: 7%
HOUSING	47% owner occupied; 53% renter occupied 27% (1.01 or more persons per room in dwelling unit) 19% live in dilapidated housing	55% owner occupied; 45% renter occupied 9% (1.01 or more persons per room in dwelling unit) 8% live in dilapidated housing

* Data from 1960 U. S. Census Report

TABLE XI

PERTINENT STUDY GROUP DATA*

IQ INDEX:

Mean for Boys: 91.8
Mean for Girls: 95.8
Mean for Boys & Girls: 93.6
(records indicate bilingual and poverty problems)

BIRTHPLACE:

Los Angeles: 9
Mexico: 9
Texas: 4

LANGUAGE IN HOME:

Spanish: 8
Spanish and English: 13
English: 1

FATHER'S BIRTHPLACE:

Los Angeles: 5
Mexico: 10
Texas: 6
No information: 1

NUMBER OF SIBLINGS:

Low: Only child
Average; 4
High: 11

MOTHER'S BIRTHPLACE:

Los Angeles: 4
Mexico: 10
Texas: 3

SEX OF SIBLINGS:

Of the 22 in study group there were a total of 44 brothers and 26 sisters.

FATHER'S OCCUPATION:

Operative and related: 8
Service workers: 7
Laborers: 3
Businessmen: 1
No information: 3

AGE RELATION OF SIBLINGS:

Younger: 44
Older: 24
(age range of children in study group from 7-12)

MOTHER'S OCCUPATION:

Housewife: 15
Sewing: 4
Machine operator: 1
Assembler: 2

*from public school records